Feathers Flying:
An Experiment and Subsequent Lesson Proposal in the Practice of Inclusive Design

A Senior Honors Thesis

Presented in Partial Fulfillment of the Requirements for graduation *with distinction*
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by

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Introduction

Many men have a cherished relationship with their wallet. Tattered, torn, and tired like a grown up security-blanket, it provides one quiet confidence throughout his day, and if he ever leaves the house without it, he feels as if a part of him is missing. He cannot explain this feeling other than to say that his wallet is comfortable.

As seniors in Ohio State's nationally-ranked product design program, we were captivated by this experience that in effect defines our chosen career. While engineers and manufacturers can make objects, only designers can provide the context to make those objects cherished.

Initially, our intent was to analyze this experience of "comfortable" relationships with objects and its role in product design, in an attempt to quantify what seemed a highly subjective and unquantifiable occurrence. While all designers can easily recognize it when it happens, most do not actively design toward it, largely ignoring the potential emotional attachment between their clients and their objects of design. We set up an experiment to measure the demonstrated difference between the effect of local design objects and the affect of design icons. Throughout Winter, Spring and Summer Quarters of the 2009 Academic Year, we worked as a two-person team to assess the active role affect can play in the traditional design process.

A definition of the effect/affect distinction in the context of product design and experience, as it was employed for this experiment: *effect of local design objects* as we have used it refers to the impressions and reactions that an object of design evokes from its user. This includes, but is not limited to, comments and opinions of that object's physical appearance, physical properties, and ergonomics (ease or difficulty of understanding how to grip, use, and change/adjust the product). These are the impressions reflected between user and object. *Affect of design icons* as we have used it refers to how famous designers and their objects of design, absorbed into the public conscious, create stereotypes and preconceived notions (i.e., an Italian name lends an object credibility as being generated by a respected designer) that influence a person's perception of a newly observed object of design – in this case, one which would be of our own development.

Given the controlled variable frequency of use (as with any emotional bond, interaction with the object of the user's affection must occur on a regular basis), we attempted to determine what combination of attributes crafts the relationship that exists between people and their most cherished possessions. These attributes could include, but are not by any means limited to, materiality, context, fun,

friendliness, investment, exclusivity, tradition and innovation. In order to best measure the effects each of these has on a designed object, we spent fifteen weeks designing a household product directly intended to connect psychologically with its user. Household products were chosen as a category for two primary reasons. Those whom we interviewed at the outset of the project and named their most cherished possessions tended to cite objects that they: 1) either used in their home on a frequent basis (the importance of frequency of use, as previously mentioned; wallets, articles of clothing, kitchenware, etc.), or 2) objects that if not used frequently were at least on prominent display somewhere within the home (baskets, blankets, a favored armchair, etc.).

The product we developed as a team – a pitcher-and-cups serving set – was created, refined, and evaluated in the following phases:

Phase 1) Research: interviews with peers, faculty, and other design professionals, benchmarking of current products, and secondary source exploration.

Phase 2) Hypothesis: based on research, begin to develop product line that theoretically encourages emotional investment.

Phase 3) Ideation: brainstorming, concept sketching, basic modeling, and consideration of initial concepts.

Phase 4) Development: bringing abstract ideas to more concrete forms through computer aided modeling.

Phase 5) Perform Experiment: consumer and retailer testing, determine success of product line in creating affinity and psychological bond.

Phase 6) Analysis: collecting and assembling experiment results data.

Phase 7) Evaluation: faculty review, reflection and final publication of overall contribution to the design department.

Our end goal was to answer two primary questions raised in the initial phases of the project.

- What affect do objects that popular culture has labeled “high design” have on consumers when judging a new product? What criteria do they use to name something “high” vs. “low” or non-distinctive design?

- If product designers were armed with basic knowledge of how and why consumers purchase and treasure products based on psychological attachment, could they then actively design

towards this goal when desired? Furthermore, is it appropriate that they aspire to this goal at all times?

If the answers our results allowed us to construct were deemed satisfactory, our process and conclusions from the experiment would be integrated into a lesson plan that could be taught in an existing course in the design curriculum at Ohio State.

Navigation

The following research categories helped justify (and in many cases, significantly modified or contributed to) our mission.

Secondary Research

Print media offered both imagery and critique of past iconic designs, and in many cases, the story behind their creation. In Ohio State's Fine Arts Library we found a rich selection of design-related reading. It also has the advantage of being tied into OhioLINK, thereby allowing us to pull resources from multiple affiliated libraries within days. Highlights included Klaus Krippendorf's *The Semantic Turn*, which provided genuine and very complete insight into the complex theories of product semantics (briefly defined below); Del Coates' *Watches Tell More Than Time*, helping to define what subtle design touches make a product beloved by its users; and a set of international design compendia that featured great 20th century product design in Germany, Scandinavia, and Italy. These helped us to benchmark what stylistic and thematic traits were associated with what markets. Later, this provided a foundation by which we could assign our product an appropriate design theme and associated name.

Faculty Input: Reinhart Butter

In any project dealing with the perception and psychology of products, a talk with Ohio State Design Professor Emeritus Reinhart Butter should be required. Professor Butter collaborated with Klaus Krippendorf to develop the earliest theories of product semantics (in Krippendorf's introduction to *The Semantic Turn*, he credits Professor Butter for practicing semantics "long before they had a name"). Krippendorff and Professor Butter, in a double issue of *Design Issues* from 1989, define product semantics as both:

- *A systematic inquiry into how people attribute meanings to artifacts and interact with them accordingly*

  and

- *A vocabulary and methodology for designing artifacts in view of the meanings they could acquire for their users and the community of their stakeholders.*

Krippendorf proclaims that "Humans do not respond to the physical properties of things, but to their individual and cultural meanings." This theory seemed to sync perfectly with both of the questions we were attempting to answer: what criteria do consumers use when assigning objects the labels of "high" and "low" design, and how can designers *plan* to incorporate a level of psychological attachment into their products?

Professor Butter consequently integrated the findings from his semantics studies into the industrial design program at Ohio State, assisting in the creation of its user-centric process approach that is the program's cornerstone. He not only provided us with copies of past and recent semantics papers, but gave us several suggestions as to the course our project should take. From the beginning, he made us aware that semantics is more than simply a clever and engaging visual metaphor that "hooks" a user; there is an entire psychology to product interaction that we would have to pay careful attention to when designing our product. Designers "often go about their research in ways that make sense to designers," but one must not overlook the influence of other disciplines and the structure of the scientific method, which, unlike most of the time-bound projects we undertake, allows time for an evaluation phase where the success of the solution is tested. This is the point at which we decided to include an evaluation at the end of our design process.

After speaking to Professor Butter and conducting preliminary research on product semantics, we acknowledged the fact that since this project was to be conducted within a limited time frame and secondary to our studio projects, it was unlikely that our end result would be a theory anywhere near as influential as Krippendorf's. The thesis may not even serve as a theory in the end, but rather, an experiment that leads to conclusions on a specific part of Krippendorf's theories.

Internet References: Retailers and Design Commentary

The Internet gave us a critical quality that books could not: an instant look at what is currently being discussed as "good design" or "bad design," and what retailers across the world are featuring in their stores.

For design criticism, we consulted blogs and discussion groups such as Yanko [http://www.yankodesign.com] and Metropolis Magazine [http://www.metropolismag.com] devoted to recognizing distinctive new designs, both from schools and the international marketplace. The blog is still a relatively new media, but its importance in providing immediate and widespread attention for up-and-coming designs is crucial. Online versions of product magazines such as I.D. and Wired also gave us a good impression of what is currently considered distinctive or breakthrough in the realm of all products, not just housewares.

We browsed a wide range of retailer websites, from Walmart (known for its inexpensive everyday items) to Ohio State's own Wexner Center Store, which specializes in ultra-high-end designers like Alessi (where else can you buy a designer toothpick holder for forty-seven dollars?). This showed us how the cutting-edge themes being discussed in blogs and magazines are trickling down to the consumer level, and which stores offer genuine versus knockoff designer items.

Criteria

To catalyze the design portion of our thesis, we needed to establish design parameters by developing a list of desired objectives ("The product should...") and constraints ("The product must..."). These are intentionally nonspecific, intended to guide design development rather than define exact details of the product. Due to the early stage at which we established these guidelines, they are perhaps even more general than they would normally be in the context of a project with a straightforward problem scenario. In our case, they served to begin directing us toward a specific area within our chosen product field of housewares.

Objectives, as the name may imply, are characteristics that the product could meet, though they are not concrete and can and should change based on discoveries made throughout the design process. In an ideal scenario the product would meet all of them; realistically, it will have to settle for meeting most.

Constraints are unchanging and are the qualities that a product absolutely must have to remain true to its designers' intentions (and the user's needs). The designer must be careful not to be too limiting, yet also not so open-ended that ideation sketching takes too long to point in a particular direction.

*Objectives: The product **should...***

Fit in with a high level of design aesthetic, using the featured products at the Wexner Center Store as a benchmark (see Appendix XIII). As observed, almost all these products share most or all of the following characteristics:

Attention to detail
Surface transitions
Attention to proportions
Sense of three-dimensional mass
Sense of physical mass
Distinctive use of color
Context that references former great design

Contain inherent characteristics that result in an aesthetic that most consumers would see as “playful”

*Constraints: The product **must...***

Contain metaphorical semantics
Be a consumer-level product, specifically a housewares item
Designed for use on an everyday basis
Intended to exist within sight at all times

Design

With basic parameters set, it was time to begin the part of the project that we most looked forward to: designing the product itself. This began with an intense series of “whiteboard sessions” during Winter Quarter. (see Appendices I-III)

In searching for a product profile that would best satisfy our requirements for a houseware, a metaphorical reference, and a “playful” aesthetic, one of the major categories we explored as a potential base for styling was animals. Throughout our research and gathering of others’ impressions of our benchmarked products, products that consistently succeeded at engaging their audience with a witty analogy or striking visual image were based on animals. For instance, Alessi offers a toothpick holder that dispenses toothpicks when a rabbit is pulled out of a hat (see Appendix XIII, “Magic Bunny”). This product combines many of the elements we were striving for: functionality, friendly form, and a laughter inducing allusion to the well-known magician’s hat trick.

Before delving too deeply into animal references, we first wrote out an exhaustive list of “household objects with significant design potential.” This was done with the assistance of retail catalogs and peer collaboration. These items were chosen for several reasons, including a) objects that have previously seen little or no styling input, such as a coat rack; b) objects that have an action associated with them that could be metaphorical; and c) objects that already have creatively styled or designed elements, such as can openers with the OXO GoodGrips system. One “whiteboard’s worth” of ideas included:

Plunger	Coasters	Watering Can
Power Strip	Clock	Potted Plant
Stapler	Watch	Egg Slicer
Trivet	Napkin Holder	Rolling Pin
Key Holder	Candlestick	Stemware
Spatula	Soap Dish	Silverware
Tie Rack	Butter Plate	Remote Control

Mop
Lock
Umbrella
Duster
Gravy Boat
Toothbrush Holder
Toaster
Lamp
Gravy Boat
Potato Peeler
Coat Hanger
Coffeemaker

Next we compiled a list of recognizable animal actions. “Lions roar,” “Chickens run around with their heads cut off” - some slightly more folkloric than others, but commonly recognized by everyone from children through the elderly. Some examples:

Armadillos Hide
Giraffes Reach
Chickens Run Around Headless
Crocodiles Chomp
Chameleons Change Color
Octopi Ink/Have Eight Legs
Turtles Hide
Frogs Jump
Raccoons are Bandits
Elephants Never Forget
Camels Hold Water
Roosters Crow
Coyotes Howl at the Moon
Fireflies Light Up
Lions Roar
Donkeys Kick

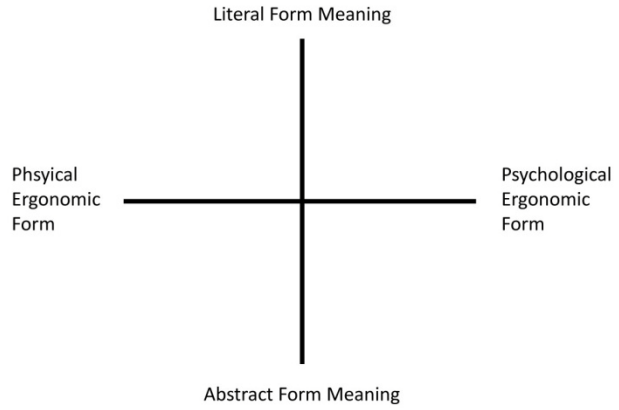
A third list contained actions that could be shared by both animals and products.

Dives
Scrubs
Peels
Attaches
Hangs
Keeps
Swishes
Flattens
Protects
Scrapes
Keeps Dry
Scrubs
Underwater Flips
Stirs
Reminds
Heats
Slices
Holds
Shines
Sends Signal
Pokes
Holds Liquid
Grips
Insulates

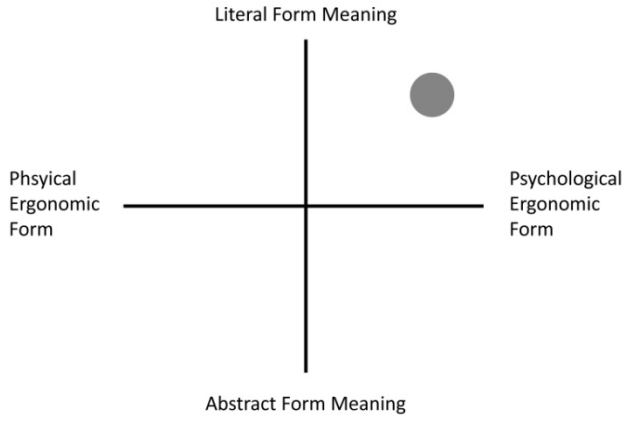
Throughout this process, we were repeatedly drawn back to an early sketch from when animal metaphor was chosen as a semantic theme. It showed a prototype for a pitcher and cup set that “nests” together, with the pitcher styled to resemble a mother hen and the cups styled like chicks. When the user pours liquid into the cups, they are “feeding” the chicks. (see Appendix IV) Peer reviews confirmed that none of the other animal/product action verbs we worked with could be as successfully interpreted in a semi-abstract form, and so we pushed ahead to develop the serving set concept.

It was at this phase that we checked ourselves against the criteria established during late Fall Quarter, and received some critical advice from Jim Arnold that affirmed our mission.

Jim plotted the following four-quadrant graph, with Ergonomic Form (ranging from Physical to Psychological) on the X-axis and Form Meaning (ranging from Literal to Abstract) on the Y-axis.



In basic terms, products with high Physical Ergonomic Form are best for the user to handle, but with an Abstract Form Meaning they are just shapes without any attribution to recognized forms. Psychological Ergonomic Forms indicate their function to the user through their form language rather than overtly obvious and expected details; for instance, a door handle that is simply a bar is a Physical Ergonomic Form, but one that is playfully shaped like a hand extended for a handshake is a Psychological Ergonomic Form; we don't expect it, but we know how to use it because it references another action that exists in our subconscious. A product with Physical Ergonomic Form but a Literal Form Meaning is immediately recognizable, though there may be more challenges for the designer to confront when making the product visually appealing. After considering this graph, we decided that our serving set should ideally appear in the upper-left quadrant. It should have a Literal Form Meaning (the hen/chickens association) but a Psychological Ergonomic Form, meaning the styling and ergonomics are integrated according to the animal-based design theme.



With this design ideology in mind, we set out to benchmark current mid- to high-price pitcher and cup sets from retailers like Crate & Barrel and the Wexner Center Store. This both allowed us to see where our product could be aligned with existing product in a retail setting, and also made us aware of current

styling elements being featured. It was immediately apparent that Crate & Barrel's offerings were much more conservatively styled and featured primarily Physical Ergonomic Forms (see Appendix XIV).

An exercise we employed at this point to keep us on track with our goals was to write out the sentence, "Is this product the most _____ it can be?", inserting qualities like "effective," "interesting," and "functional" into the space. In order to address functionality, several studies were carried out to test the feasibility of a "pour assist" function for the pitcher, inspired by a concept featured in a Scandinavian design book.

This "pour assist" was thought to help reinforce the allusion to the mother bird feeding its young. However, subsequent attempts to figure out an inexpensive engineering solution to the problem did not yield any feasible concepts, and the idea was abandoned. (see Appendix V)

Ideation sketches attempted to integrate different bird species' characteristics into the set. It was discovered after many attempts that the sets, when seen collectively, were too visually divergent to be considered a product family, one of our earliest goals for the project.

In response, we established a new physical standard for the product, featuring a large cylinder at the center of eight smaller cylinders with their handles pointed outward. Slight variations in color and the two key functional elements - handle and spout - would differentiate one bird species from another, so that when seen individually they are distinctive and recognizable, but seen as a product family they have high group cohesion.

A new set of ideation sketches followed this standard. Eight of the most successful were selected, then narrowed down with the aid of peers and faculty. From cockatiel, Canada goose, chicken, crow, penguin, flamingo, pelican, and parrot designs, the chicken and parrot were considered most successful due to the minimal amount of representation they needed, in color and form, to be instantly recognizable. This was determined after all eight original concepts were "tested" on individuals not familiar with the premise of the project. (see Appendix VI-VII) These tests were blind and consisted of the subject being shown the sketch of the pitcher set and given time to assign an identity to it (parrot, flamingo, etc.). A photograph of the actual bird was then placed next to the sketch, and the tester could comment on how successful or unsuccessful they thought this association was. Though we were only able to test this on six individuals (ideally we would have constructed a survey to send to 250-plus), the results were consistent.

The next phase was refinement, with more exacting sketches leading to dimensioned Rhino models whose measurements were carefully designed to match existing standards in retailers' lineups - hence the 64-oz. pitcher and 8-oz. cups. This was a critical part of maintaining the form/function balance that we had identified as so important to a cherished product experience. (see Appendix VIII)

The aesthetics of the final product closely match what we believe to be successful criteria for a household item that is metaphorically recognizable and desirable (but approachable) on a “high design” level.

Metaphorical recognition begins with its colors: bright and reminiscent of spring, the application of orange, yellow, white, red, and green was carefully calculated to provide the audience with just enough information about chickens to establish the critical bridge to the user’s memory. Beaks are orange, the mother hen is white and red, the baby chicks yellow, and the base plate green like barnyard grass. However, the blocks of color are not so detailed that the reference becomes overdone or kitsch. Further anatomical references such as feather texture and feet are left off to allow the product to stand alone as a household good that you wouldn’t grow tired of seeing on a daily basis.

Subtle physical details guide the viewer to bird anatomy as well. The spout of the mother hen curves downward to a point, echoing the appearance of a beak while retaining one hundred percent of its function. The handle of the pitcher stands above the rim in the manner of a raised tail or head crest. The baby chicks’ beaks are perhaps larger than necessary due to their function as handles, but because they too are pointed and face outward from the center of the piece, they immediately distinguish themselves as a group of babies around their mother.

Functionally, the pitcher and cups perform well due to their dimensions being consistent with similar, current products. The base tray is a unique touch because of its ability to draw the set together, creating that last critical bit of visual harmony that completes the metaphor.

Final three-dimensional computer models were made using Rhinoceros, while renderings were created in SolidWorks.

At this point, we were satisfied enough with the design, and received positive feedback from friends, parents, and peers. However, simply hearing good things from closely associated people didn’t seem like a complete evaluation of the product. We clearly needed a more effective vehicle to assess how successful or unsuccessful we were at designing propinquity, or the “Oh, now that’s worth taking home at any price” factor. Considering the time and budget constraints imposed on the project, we decided to test reactions generated by the product in a key category of potential stakeholder that we had thus far failed to address: the retailers who would be selecting, marketing, and selling the product in their stores.

Research

In order to find out just how successful our final design was, we decided to attempt to find out how it would fare on the market. It soon became clear that the best way to assess our design was to force it to

compete with the products that we had benchmarked earlier in the design phase. Quite simply, the design would be judged a success if it were seen by consumers, retailers, and those already familiar with this style of playful aesthetic "high design" to be equal to the products already available in this marketplace.

The challenge of determining such success is that we were dependent on the perception of the user, which we could not directly control. Again, we recognized that the true success of the product lies in the user's perception of the product, and while we can systematically design products, we cannot in any way design the user or his way of interpreting our design. Still, it was extremely important to us to hear how our product would be interpreted, and to attempt to quantify our users' perceptions as a way of judging the success of our design, and our success as designers.

Since we were going to be attempting to quantify our success through subjective opinions, we thought it important to acknowledge the variables which we cannot control, namely, the preconceptions and biases of those involved.

Our Bias

Every designer hopes that his designs will be well received by his intended user. Obviously, as we had put so much time and commitment into our research and design methodology so far, we were especially hopeful that we could call this project a success. However, since we were so eager to cast our design in a positive light, we were aware that we might represent the project with more passion than the projects to which we were comparing our design, which could influence the outcome of our interviews. Also, even if we could be sure that we represented all competing products equally, we might be more likely to hear users' commentary on our work as more positive than it would have been if we were able to remain completely objective.

Personal Bias of Stakeholders

While it was our intention at this point to find interviewees who would evaluate the product on its possible merits in the marketplace rather as well as their personal taste for the product, there was no more a way to eliminate their personal biases than there was a way to eliminate our own. This is to say, while we wanted to find out whether or not our product was seen as valuable to the subject of the interview, we could not control their need for the product, their taste for the product category and style, or their general dislike of anything concerning chicken metaphors.

Corporate Retail Bias

Since we thought it important to gather the opinions and perceptions of our design from retailers and retail environments, we needed to acknowledge that many retailers might not be willing to comment on

merchandise that was not their own in an attempt to protect the company. If they were able to comment, they might not be willing to portray any merchandise from any retailer as more appealing, successful, or marketable than their own, since it is first and foremost their job to sell the products of their corporation. Their personal bias and experience may also affect their answers should they be able to step outside the bounds of their professional "voice" and offer candid commentary.

Context Affects Perception

It was also important to us to give our product an equal chance of unbiased evaluation in the interviews as the products to which it would be compared. This meant the creation of an identity, the setting in which we portrayed the product, including price, any retailer which whom we decided to associate our product, and the views we chose to show the interviewee. It was not known at this time how much each of those factors would influence the outcome of our experiment if at all, but we thought it important to recognize that potential.

Market Simulation

In an attempt to present all products and concepts to be compared in the interviews as equal, we decided to create market simulation sheets for our design. Using basic image editing software and principles, we were able to represent our design as if it were available from a number of retailers' websites. We selected the retailers of Target, Wal-Mart, Crate & Barrel, as well as the Wexner Center Store for their differing clientele base and perceived level of design aesthetic. (see Appendix IX-XI)

For each market simulation, we represented our product as equal to the rest of the merchandise available on the website. For example, we made our decisions on price, branding, and the featured view of the product for each retailer based on how other comparable products on that retailers website were represented. We also decided to create a market simulation of a design blog posting so that we could represent our design without any retailer association or price. Seeking a European design association, we named the product "Uccello," which is Italian for bird.

Interview Methods

We made appointments to speak to someone representing each of the different retailers we had chosen for the market simulations, and we conducted each interview the same way. Before the interview, we chose one retailer that we viewed as comparable to the retailer we were going to interview, and mixed our market simulation in with actual market representations from that retailer's website. Then, during the interview we asked the subject to comment on the designs of products from their store as compared to the designs of their competition. The interview subjects did not know that we had designed any of the products, or that our design was not actually available for sale at the competitive retailer. This

allowed us to as much as possible eliminate our own bias or the bias of people wanting to be polite toward our work.

Each interview was approached with a basic set of questions intended to start an open-ended conversation with the managers. These questions were split into those asked *before* the market simulations and competing products were displayed, and those asked *after* the printouts were spread on the table. Questions from before included "How do you see the products offered in your store competing with those from *x* and *y* store?" to establish where the managers see their product line on a design and market spectrum and "How do you select the products that you choose to display and sell?" After the printouts were displayed, specific questions comparing one product to another were asked, i.e., "Which design would you see as more desirable, *a* or *b*, and why?" This prompted the interviewees to come up with specific reasoning for their preferences based on color, shape, etc.

In Interview #1 (Pottery Barn) and Interview #2 (Wexner Center Store), conversation deviated from the intended questions fairly easily as the managers freely provided their own commentary.

Interview #1

We conducted our first interview at a local Pottery Barn store, thinking it to be direct competition (as far as brands, price, ranges and types of products offered, and clientele) with Crate & Barrel. For this interview, we placed our product with the products from the Wexner Center Store, which we considered to be publicly viewed as slightly more "high design" than either Pottery Barn or Crate & Barrel. The manager of the Pottery Barn that we interviewed conceded that he felt the same way toward the retailers. We considered this interview extremely effective and informational. Not only did the interviewee not notice our design to stand out as being a simulation, he pointed to it as one of his favorites among what the Wexner Center Store had to offer. He pointed to the proportions, use of color, unique approach to a traditional object, and interaction as a set as marks of "high design" that would make any product especially valuable to him.

Excerpt:

> Christian: All right, so we go through Crate & Barrel here. We've got, like, these pitchers that are $16.95 and $26.95 (pause). This pitcher is $24.95, but looks kind of plain compared to that—at least from an outsider's point of view.
>
> Pottery Barn: Right.
>
> C: Is there anything that can define what makes something, like, "Oh, it's contemporary," or "it's intriguing," visually appealing, you get attached to it…
>
> PB: Right. I would definitely say, you know, from my experience, like, a lot of the Crate & Barrel items, like most of these you're picturing (pause), definitely—except maybe for [C&B; Cove Pitcher], this to me is a little more traditional. These pieces [C&B; Ona Pitchers] definitely a little bit of a contemporary with the hole through the center of it,

absolutely, um, is a little more contemporary using that as a handle. I think, uh, customers would perceive that as contemporary.

Interview #2

We conducted our second interview at the Wexner Center Store, our design having just been evaluated as belonging with their selection of merchandise. This interview was equally as successful and informational, and the manager of the store seemed to feel similarly about our product, which we represented as being from Crate & Barrel. She also was not able to distinguish our product as being a simulation, and she seemed to feel it was the only one of the products shown as being from Crate and Barrel that had enough merit to compete with Wexner Center Store merchandise. She described the aesthetic of our design as Danish-modern, and was especially in love with the use of metaphor in the design. She described it as being an inside joke between the object and its user, one that made the user feel smarter and privileged to be on the inside of that joke. She pointed to the designs ability to have an effect on her in this way as a mark of high design that made it especially desirable, and stated that while she was fond of the design, she was certain she could not afford to purchase it.

Excerpt:

Christian: Yeah. Well, but there's other people that label themselves as kind of high-tier design as well. There's Crate and…

Wexner Center Store: …Barrel. Yeah, (taking Crate & Barrel papers) the name Crate and Barrel alone is probably a good 50% of what people are paying for, just the fact that it comes from Crate and Barrel. Um, now see something like this (pointing to C&B Ona), that's unusual and it has sort of an unusual name. The "O" shape in there (pointing to the handle of the pitcher) is echoed in the "O" shape in the name. Plus it makes it sound exotic, maybe European or something. But all of these white things here (pointing to the C&B ceramic and glass pitchers and mugs) and everything, kind of all purpose…

C: Does it look European?

W: Not really.

Interview#3

We conducted our third interview at a local Crate & Barrel Store, where we spoke with the store's merchandiser in charge of displaying all housewares. While the interview could be judged as successful because the interviewee was not able to tell that our design was in fact a simulation, she spoke mostly in terms of what she enjoys about her job. She explained that she thinks it is her job (implying that it was not the designer's job) to give personality to objects through the creation of her store displays. She reacted skeptically to objects that had bold colors and exaggerated designs, stating that they did not coordinate well with other objects and were hard to work into displays. She did not especially like our design, nor did she like the products which we had originally identified as being the ones with which we were most interested in competing.

Excerpt:

> Crate &Barrel: [Wexner; Mug Pie] is neat though.
>
> Blake: The Mug Pie?
>
> Christian: Overall, is it a different design? Better design? Worse design? Can you quantify it at all?
>
> C&B: I don't know if I can give a number to it or rate it. It's definitely different. It is more of a specialized designer feel, like you will definitely feel like you're drinking out of something that was just designed for your table, or, you know, just for you. Um, it's got more of an edge to it, so I mean, I would just have to say different, I don't know if it's better or worse.

Reflection

After our interviews, we were able to pinpoint what we would have changed about our interview tactics known the results ahead of time. First, it would have been more informative to discuss and compare the designs having all the actual products in person, rather than just using pictures. This would have required us to prototype our design as well as purchase all of our benchmark products, which we simply did not have the funding to do (having been denied a $500 grant from Undergraduate Student Government). Secondly, it was impossible to eliminate the effects of marketing on this study. In the retail world, both the product and how the product is marketed play heavily in the minds of retail employees, and it was impossible to study the success of the design without the help of marketing. While we feel we minimized the influence marketing had on our results as best we could, we simply could not eliminate it. Finally, had time permitted, we would have ideally interviewed ten or more store managers, not three, from a wider variety of stores. Thus, we can only claim limited influence from these interviews on our results.

Conclusions and Acknowledgments

At the end of our interviews, we assembled all of our data, and were able to make three main conclusions:

Conclusion #1

The success of high design rests in its inclusivity*. It is not enough to have designs that are playful and clever; the designs work best when they include the user on an understanding through the use of metaphor, reference, or allusion. This "inside joke" makes the user feel more intelligent, more appreciated by the designer, and better about himself. This is why high design features so many design objects that have become design icons. People love these designs because they feel that in some way the designs love them back.

It is possible though, to make the metaphorical reference of a design so obscure that most users do not get the inside joke. This makes the user feel less intelligent, worse about himself, and leaves him on the outside looking in. When high design uses metaphors that are too difficult to understand , the designs become unapproachable, and are often seen as even less desirable than products that make no attempt to include the user at all. Eventually, products can use an exclusive metaphor such that almost no one understands its reference other than the designer himself. These products, while referential, are not high design, because a metaphor that no one understands is about equal to not using a metaphor at all.

Conclusion #2

Not all design should be high design. Our first conclusion is dependent upon a spectrum where some designs are more inclusive* (and exclusive) than others. If all products were equally inclusive, none could be especially enjoyed, as they would all be equal.

Our first question that we sought to answer at the outset of the project was "What affect do objects that popular culture has labeled 'high design' have on consumers when judging a new product? What criteria do they use to name something 'high' vs. 'low' or non-distinctive design?" This was partially answered by our interviews, where the retail managers at both Pottery Barn and the Wexner Center Store cited quality of craftsmanship, selection of traditional and hardy materials (ceramics, glass, aluminum), a "playful" aesthetic compared to other products in a category, and a European-sounding label as hallmarks of high design. Conversely, they said that a shortcoming in any of these categories – cheap or imitation materials in lieu of authentic ones, an unknown or generic-sounding nameplate (the Wexner manager mocked a pitcher from "Cove Design" because she hadn't heard of the brand, but was interested in the apparent Italian roots of our "Uccello"), a poor attempt at imitating a known design – instantly discredited the product.

It must be acknowledged that what is considered "high design" follows trends, and the term itself varies in its definition. Generally, however, it is understood to refer to artifacts that combine form and (perhaps) function in such a way that they are desired purchases for reasons other than their function. One would not buy the Alessi "Salif" juicer solely because they needed an effective juicer, but because it is worth spending upwards of $20 on an object that is as much an artfully conceived conversation piece as it is a juicer.

As designers are known for pushing boundaries aesthetically, high design serves first as a pioneering influence for all design beneath it (the "trickle-down" effect; cf. diluted versions of Michael Graves' expensive houseware designs for sale at Target with more plastic and a much lower selling price). But when this trend expires, designs do become locked in a specific timeframe when that aesthetic was popular. Thus we cannot claim that what we created is timeless or even successfully a part of the animal-metaphor trend popular at the time of this experiment.

Conclusion #3

There exists an opportunity to create a methodology for designers that aids them in applying these findings to the development of products, whether in an educational or professional setting. This could provide a scientific method to form development by maximizing an object's appeal through optimizing that object's inclusivity.*

*Inclusivity is a term developed after Phase 6 of this project. It encompasses the *positive* psychological response that the collective physical qualities of a product engage in its user. We began to recognize this quality of inclusivity in our own design when several of our testers and two of the three retail managers reacted positively (by verbally expressing happiness and a sense of accomplishment) upon figuring out the mother hen/baby chicks and mother parrot/baby parrots metaphor. The user is rewarded in some way through their interaction with the product, and this interaction may be visual, tactile, or a combination of both.

Theory and Implementation

In reflecting on the outcome of our project, it became clear that for all of our efforts, we had still merely touched the tip of a subject that is of enormous consequence to designers. The designer/user relationship, in the context of emotional attachment through inclusivity and the heavily subjective "high/non-high design" distinction, is a topic that is rarely if ever discussed within the industrial design curriculum here at Ohio State and elsewhere.

That assertion is not meant to indict the university or the program for any perceived shortcomings; rather, it simply identifies a significant opportunity. In a system of ten week quarters, it is understood that only so many principles can be taught and incorporated into studio projects. Much time and effort are expended to ensure that student projects meet certain functional/ergonomic goals (to satisfy the physical needs of the user or a range of users) and to a lesser extent, styling goals (to create products that will "impress" the user through appropriate yet desirable aesthetics and make the product stand out from the competition).

Our conclusions make up what could be considered a third dimension that combines and extends elements of ergonomics, semantics, and aesthetic principles. In our earlier research we attempted to find what it was that made products by designers like Alessi so popular and aspired to by both consumers and designers. The Magic Bunny toothpick holder is an example of a product that, after talking to peers and retailers, hits on all three design dimensions.

1) Its semantic meaning is immediately understood because there is a familiar notion (stored in the user's subconscious over time) of magicians pulling rabbits out of hats. Thus, its use mechanics quickly become clear and the unit functions in an ergonomically sensible way by virtue of its familiarity.

2) The rabbit's balloon-like, cartoonish depiction results in a playful aesthetic. This makes the Magic Bunny an object of "high design" because it is radically different from comparable products that achieve the same end, and it is produced by a respected European designer. (Our retailer interviews revealed that European names are definitely associated with "high design" values regardless of the appearance or quality of the product.)

3) **The combination of 1 and 2 creates an inclusive "joke" that doesn't take long to recognize, yet generates amusement in the user. This amusement may manifest itself in the object being put on prominent display for friends and family, so that others may share in the joke. This is certainly an unexpected end for a toothpick holder, which consumers would ordinarily see as nothing more than a purely functional piece. Suddenly the designer has elevated the product by including an allusion in both its function and aesthetics that gives it the ability to transcend its use and become treasured by the user.**

It is our belief that this final point, the crux of our theory, could be illustrated to students within a two-day lecture. To save time and ensure that it fits in with the existing curriculum as much as possible, it could be incorporated as a supplement to studio courses at any point from Spring Quarter of junior year through the end of senior year. By this point students have had at least two quarters of focused product design work, and know enough about the process taught at Ohio State to be able to take elements of our theory and keep them in consideration when developing their designs.

The following is a potential itinerary:

Day 1

Background of our thesis project
- Research into design icons
- The search for the source of emotional attachment to products
- Establishment of criteria and development of design
- Refinement of design
- Testing and interviews

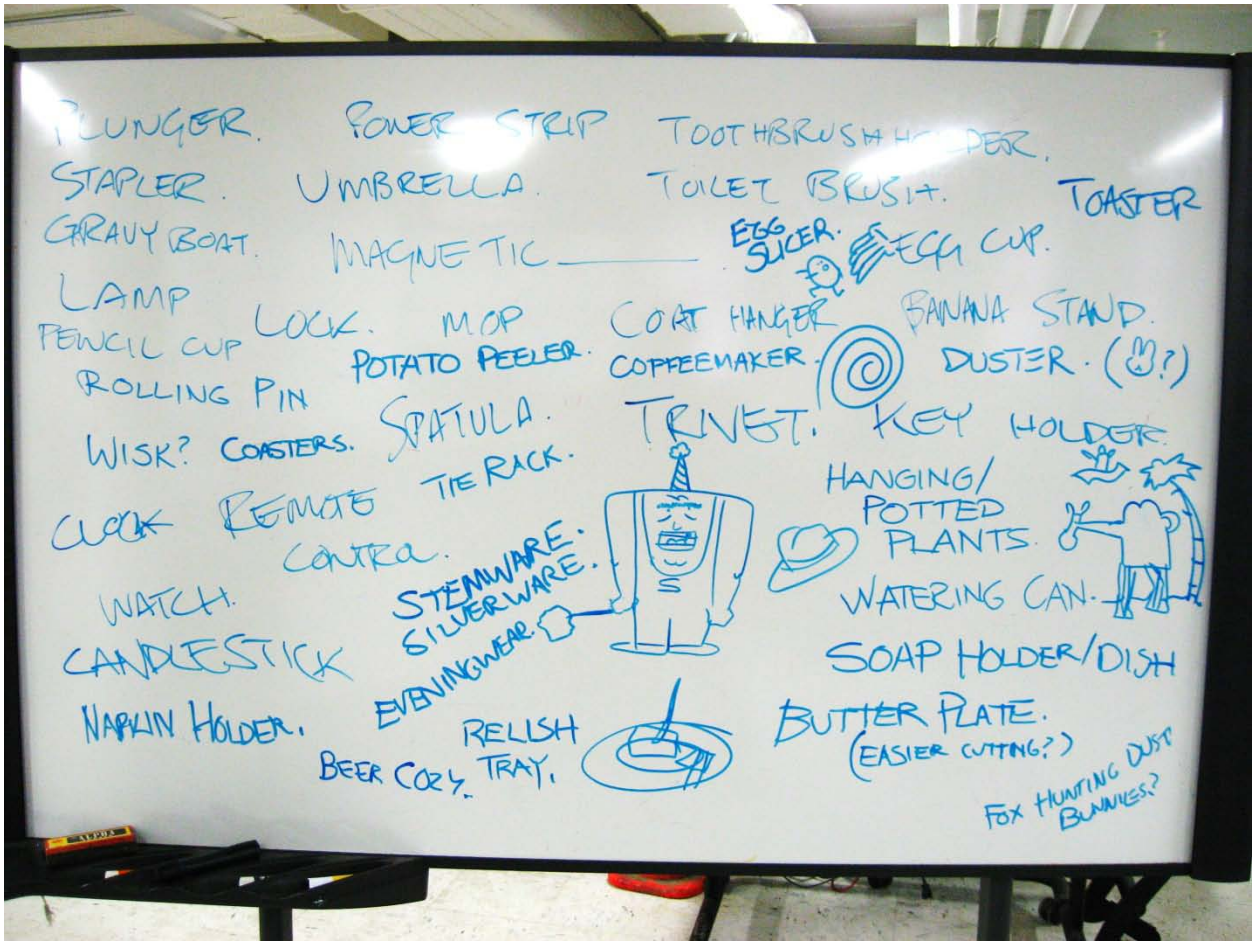
Day 2

Interactive dialogue with the students to hear their interpretations of what the interviews meant, with prompted questions such as:

- Is “high design” always good design? Should it always be strived for?
- What products do you perceive as “high design” and why? (Could include illustrative examples of existing products to prompt further discussion)
- What do you own that you would consider yourself inseparable from, and what qualities make it such a big part of you?
- Should designers always be searching to fulfill a new functional need, or is a project that focuses on improving the aesthetic of a current product to elevate its importance and appreciation just as valid?

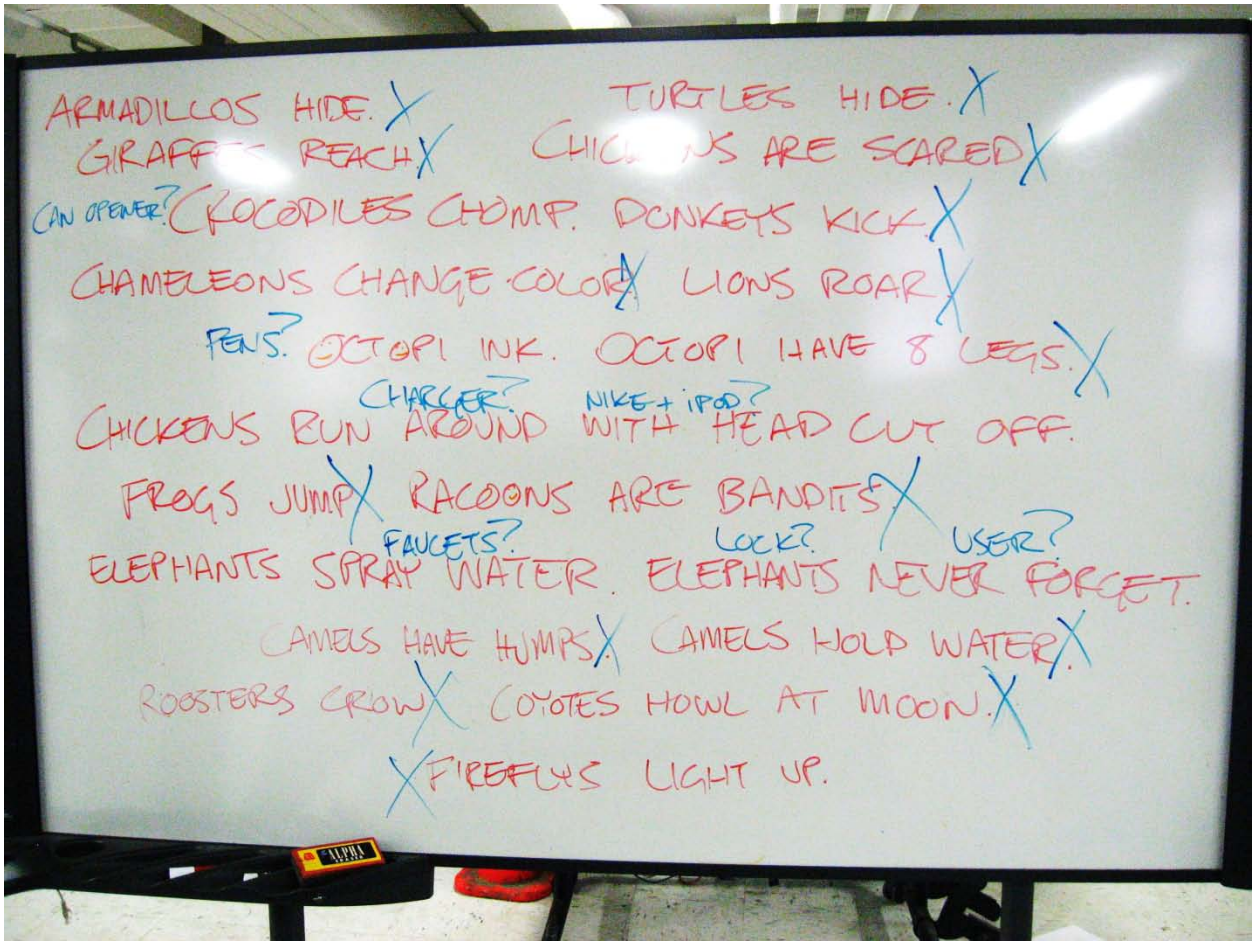
Appendix I

Whiteboard exercise: household products with significant design potential.



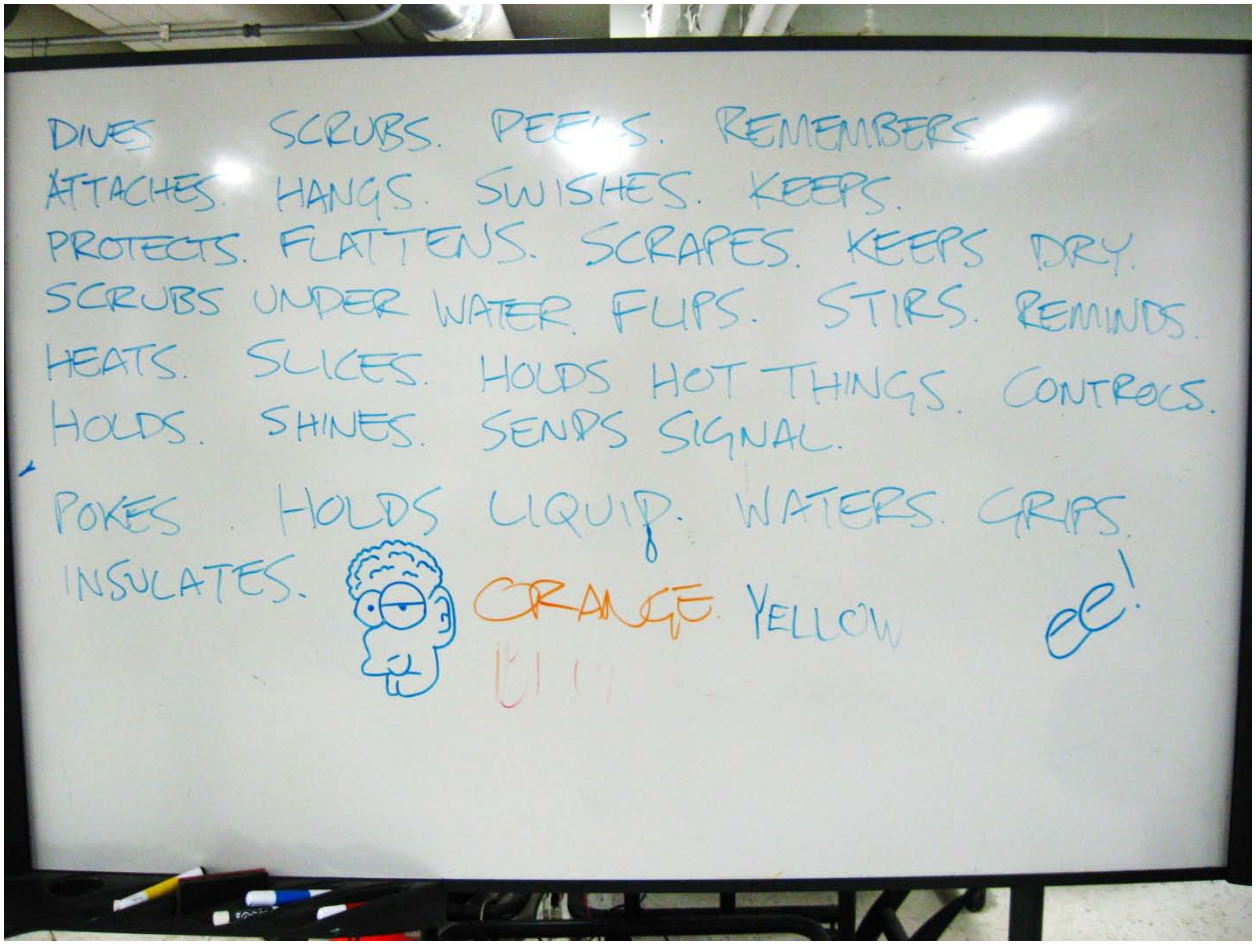
Appendix II

Whiteboard exercise: animals and their metaphorically associated actions.



Appendix III

Whiteboard exercise: actions shared by both products and animals.

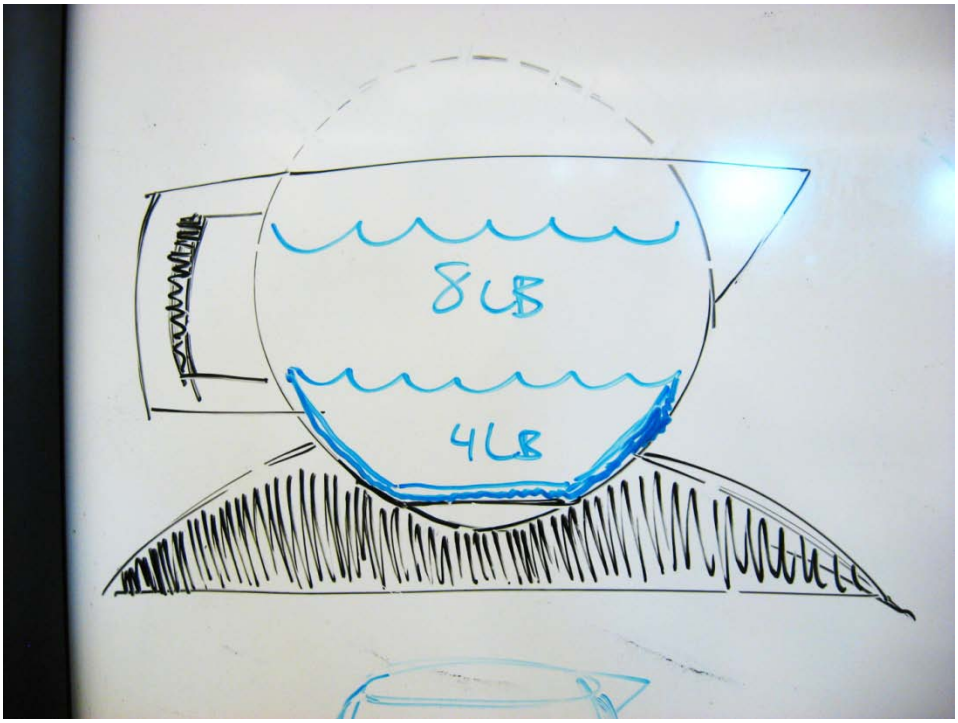


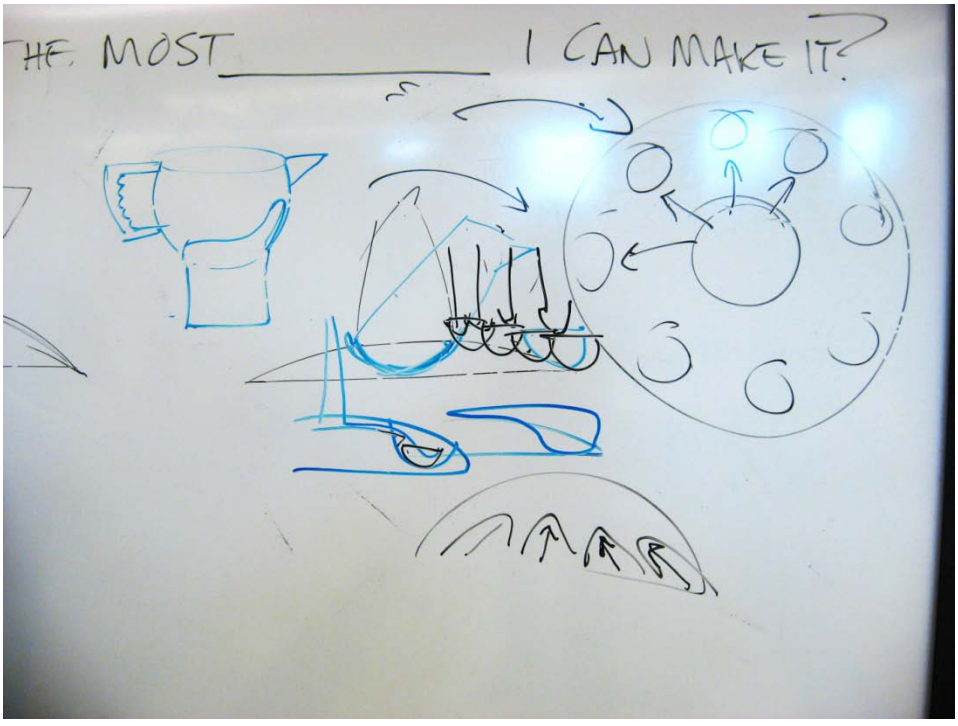
Appendix IV

Ideation sketch that evolved into the basic design direction.

Appendix I

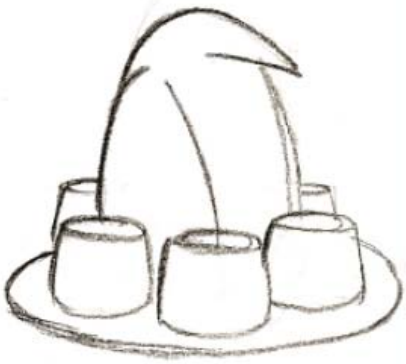
Attempts to design the unit to have a pour-assist function.

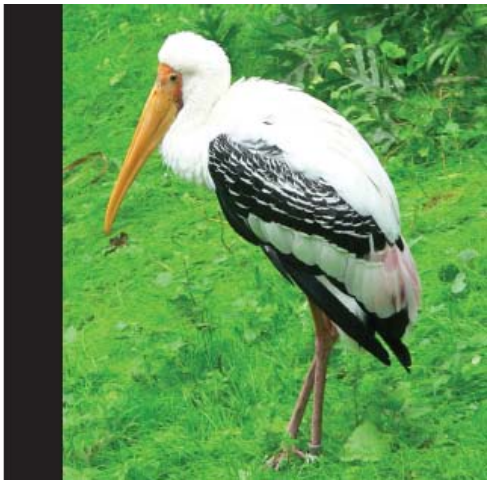




Appendix V

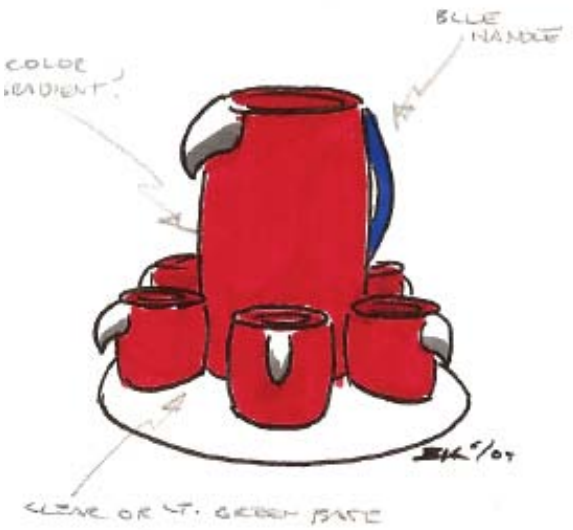
Ideation: variations of aesthetic based on bird species.





Appendix VII

Final bird aesthetic choices: parrot and chicken.

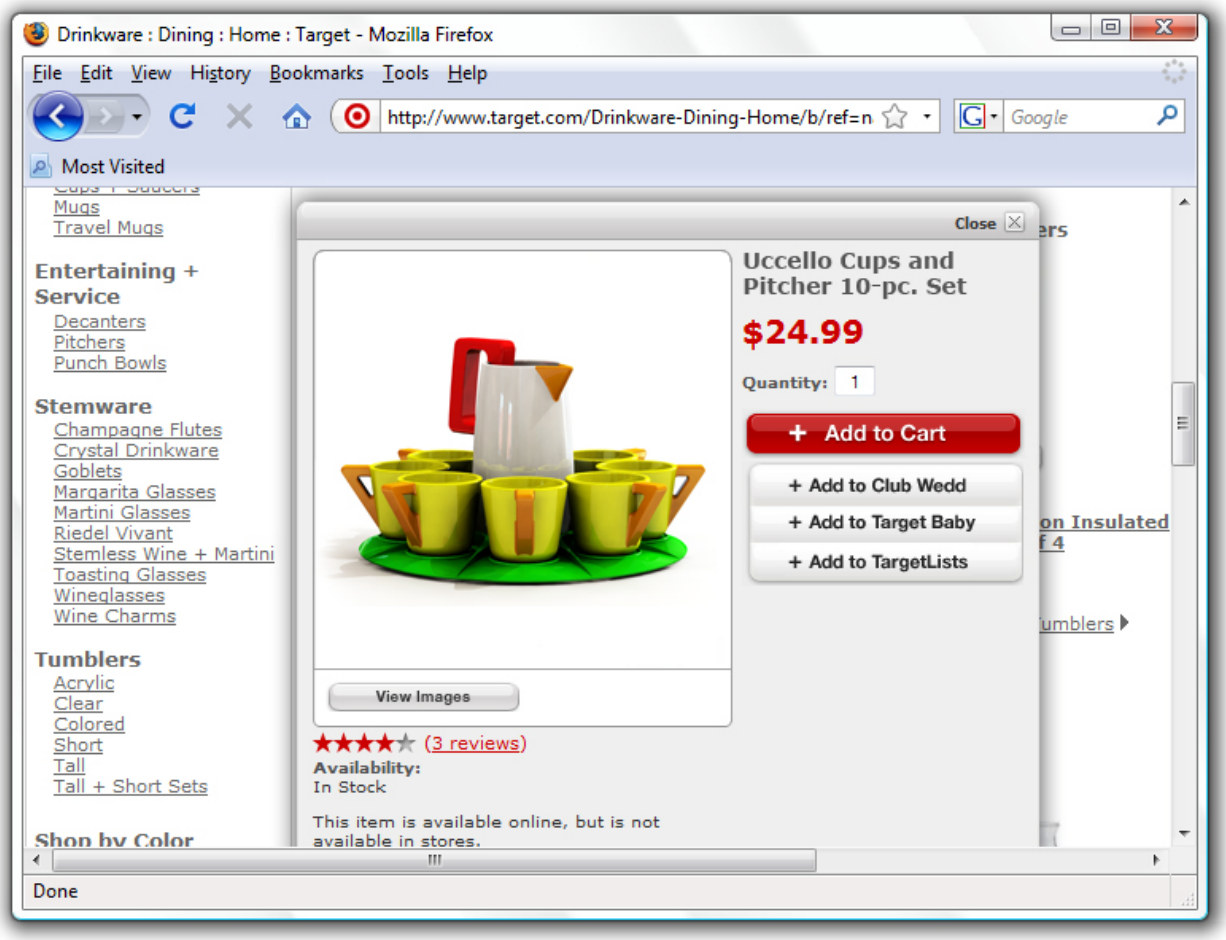


Appendix VIII

Refined designs as modeled in Rhino.

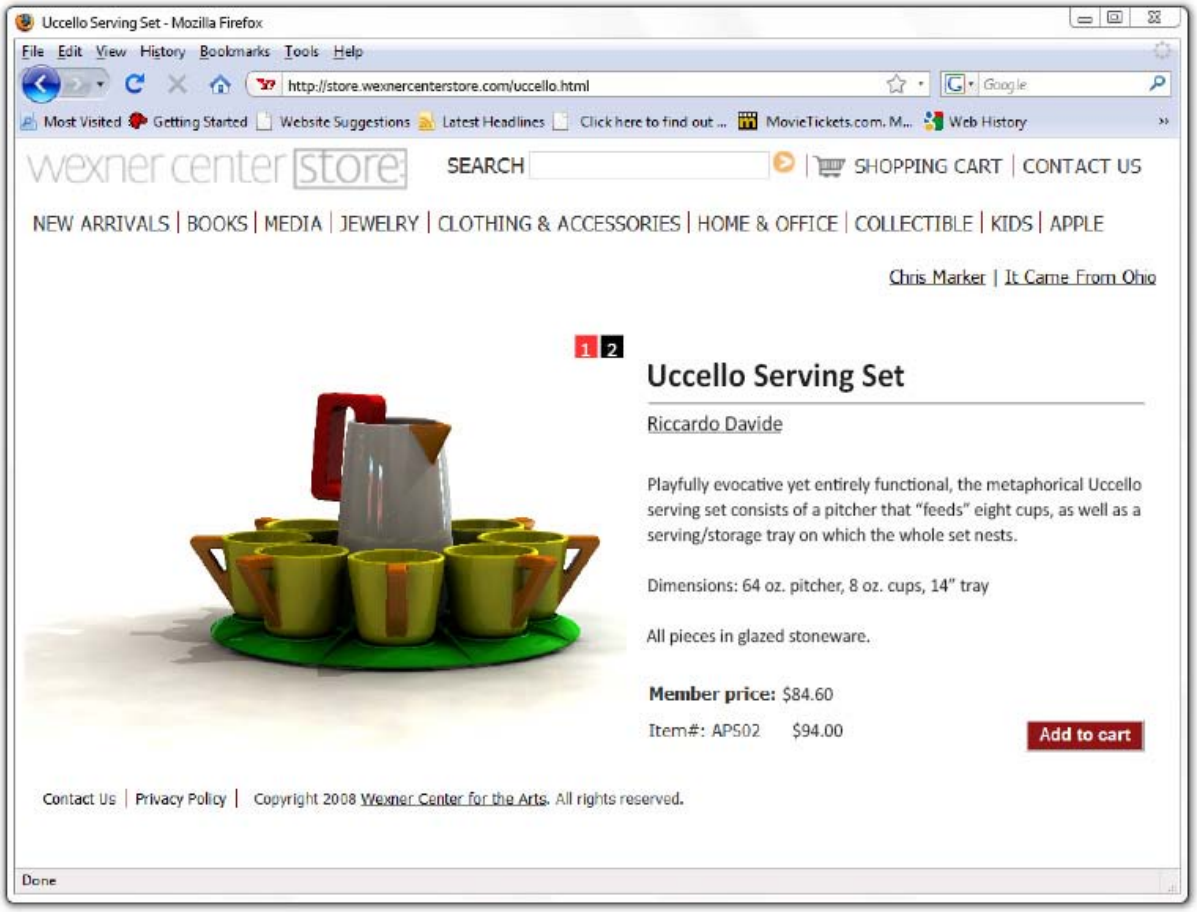
Appendix IX

Market simulations.



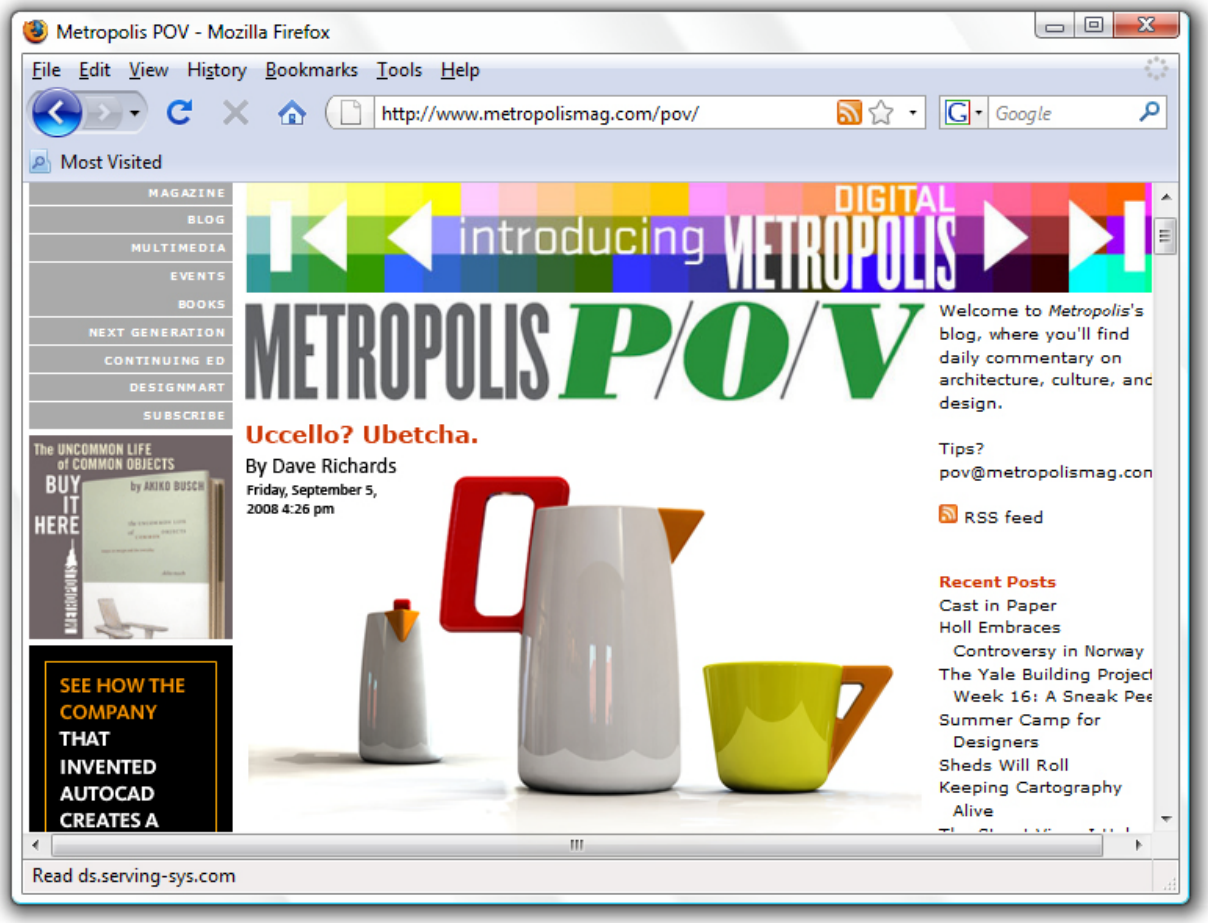
Appendix X

Market simulations.



Appendix XI

Market simulations.



Appendix XII

Examples of Wexner Center Store products marketed as “high” design.

“Magic Bunny” toothpick dispenser, Stefano Giovannoni for Alessi.

“Red October” salt and pepper shakers, PoranAran for Studio Ooga.

“Mug Pie” beverage mugs, Daniel Harper for Elseware.